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SEQUENCE LISTING

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<120> METHODS AND COMPOSITIONS FOR MODULATING LEVELS OF SECONDARY  
METABOLIC COMPOUNDS IN PLANTS

<130> pct

<140>

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<150> US 60/072156

<151> 1998-01-22

<150> US 09/012453

<151> 1998-01-23

<160> 7

<170> PatentIn Ver. 2.0

&lt;210&gt; 1

&lt;211&gt; 483

&lt;212&gt; DNA

<213> *Arthrobacter pascens*

&lt;400&gt; 1

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483

&lt;210&gt; 2

&lt;211&gt; 161

&lt;212&gt; PRT

<213> *Bacillus pumilus*

&lt;400&gt; 2

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1

5

10

15

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Ile His Ser Gly Met Val Gly Gly Arg Trp Val Arg Asp Gln Glu Val  
35 40 45

Asn Ile Val Lys Leu Thr Lys Gly Val Tyr Lys Val Ser Trp Thr Glu  
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Pro Thr Gly Thr Asp Val Ser Leu Asn Phe Met Pro Glu Glu Lys Arg  
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Met His Gly Val Ile Phe Phe Pro Lys Trp Val His Glu Arg Pro Asp  
85 90 95

Ile Thr Val Cys Tyr Gln Asn Asp Tyr Ile Asp Leu Met Lys Glu Ser  
100 105 110

Arg Glu Lys Tyr Glu Thr Tyr Pro Lys Tyr Val Val Pro Glu Phe Ala  
115 120 125

Asp Ile Thr Tyr Ile His His Ala Gly Val Asn Asp Glu Thr Ile Ile  
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Lys

&lt;210&gt; 3

&lt;211&gt; 546

&lt;212&gt; PRT

<213> *Arthrobacter pascens*

&lt;400&gt; 3

Met His Ile Asp Asn Val Glu Asn Leu Asn Asp Arg Glu Phe Asp Tyr  
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Ile Ile Ile Gly Gly Gly Ser Ala Gly Ala Ala Val Ala Ala Arg Leu  
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Ser Glu Glu Pro Thr Val Ser Val Ala Leu Val Glu Ala Gly Pro Asp  
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Asp Arg Gly Val Pro Glu Val Leu Gln Leu Asp Arg Trp Met Glu Leu  
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Leu Glu Ser Gly Tyr Asp Trp Asp Tyr Pro Ile Glu Pro Gln Glu Asn  
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Gly Asn Ser Phe Met Arg His Ala Arg Ala Lys Ile Met Gly Gly Cys  
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Ser Ser His Asn Ser Cys Ile Ala Phe Trp Ala Pro Arg Glu Asp Leu  
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Asp Glu Trp Glu Ser Lys Tyr Gly Ala Thr Gly Trp Asn Ala Glu Ser  
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Asp Ala Pro His His Gly Asp Ser Gly Pro Val His Leu Met Asn Val  
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Ala Gly Ile Pro Arg Ala Lys Phe Asn Thr Gly Thr Thr Val Ile Asn  
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Gly Ala Asn Phe Phe Gln Ile Thr Arg Arg Ala Asp Gly Thr Arg Ser  
195 200 205

Ser Ser Ser Val Ser Tyr Ile His Pro Ile Ile Glu Arg Gly Asn Phe  
210 215 220

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Thr Leu Leu Thr Gly Leu Arg Ala Arg Gln Leu Val Phe Asp Ala Asp  
225 230 235 240

Lys Arg Cys Thr Gly Val Asp Val Val Asp Ser Ala Phe Gly Arg Thr  
245 250 255

His Arg Leu Ser Ala Arg Cys Glu Val Ile Leu Ser Thr Gly Ala Ile  
260 265 270

Asp Ser Pro Lys Leu Leu Met Leu Ser Gly Ile Gly Pro Ala Ala His  
275 280 285

Leu Ala Glu His Gly Val Glu Val Leu Val Asp Ser Pro Gly Val Gly  
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Glu His Leu Gln Asp His Pro Glu Gly Val Val Gln Phe Glu Ala Lys  
305 310 315 320

Gln Gln Met Val Gln Thr Ser Thr Gln Trp Trp Glu Ile Gly Ile Phe  
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340 345 350

Gly Ser Val Pro Phe Asp Met Asn Thr Leu Arg Tyr Gly Tyr Pro Thr  
355 360 365

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Thr Glu Asn Gly Phe Ser Leu Thr Pro Asn Val Thr His Ala Arg Ser

370

375

380

Arg Gly Thr Val Arg Leu Arg Ser Arg Asp Phe Arg Asp Lys Pro Ala

385

390

395

400

Val Asp Pro Arg Tyr Phe Thr Asp Pro Glu Gly His Asp Met Arg Val

405

410

415

Met Val Ala Gly Ile Arg Lys Ala Arg Glu Ile Ala Ala Gln Pro Ala

420

425

430

Met Ala Glu Trp Thr Gly Arg Glu Leu Ser Pro Gly Thr Glu Ala Gln

435

440

445

Thr Asp Glu Glu Leu Gln Asp Tyr Ile Arg Lys Thr His Asn Thr Val

450

455

460

Tyr His Pro Val Gly Thr Val Arg Met Gly Pro Ala Asp Asp Asp Met

465

470

475

480

Ser Pro Leu Asp Pro Glu Leu Arg Val Lys Gly Val Thr Gly Leu Arg

485

490

495

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Val Ala Asp Ala Ser Val Met Pro Glu His Val Thr Val Asn Pro Asn  
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Leu Ala  
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<212> DNA

<213> *Arthrobacter pascens*

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<212> DNA

<213> Mesembryanthemum crystallinum

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1494

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<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

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38

<210> 7

<211> 37

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

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